THE ASTROPHYSICAL JOURNAL

CONTENTS OF VOLUME 470, PART 1

1996 OCTOBER 10, Number 1

	Page	Fiche
THE *HUBBLE SPACE TELESCOPE* KEY PROJECT ON THE EXTRAGALACTIC DISTANCE SCALE. VI. THE CEPHEIDS IN NGC 925 *N. A. Silbermann, Paul Harding, Barry F. Madore, Robert C. Kennicutt, Jr., Abhijit Saha, Peter B. Stetson, Wendy L. Freedman, Jeremy R. Mould, John A. Graham, Robert J. Hill, Anne Turner, Fabio Bresolin, Laura Ferrarese, Holland Ford, John G. Hoessel, Mingsheng Han, John Huchra, Shaun M. G. Hughes, Garth D. Illingworth, Randy Phelps, & Shoko Sakai*	1	256-C2
THE DIPOLE OBSERVED IN THE *COBE* DMR 4 YEAR DATA *C. H. Lineweaver, L. Tenorio, G. F. Smoot, P. Keegstra, A. J. Banday, & P. Lubin*	38	256-F9
FITTING HYPERBOLIC UNIVERSES TO CAYÓN-SMOOT SPOTS IN *COBE* MAPS *Helio V. Fagundes*	43	256-G3
ON THE ALTERNATIVE ORIGIN OF THE DIPOLE ANISOTROPY OF MICROWAVE BACKGROUND DUE TO THE REES-SCIAMA EFFECT *A. Mészáros & Z. Molnár*	49	256-G12
COSMOLOGICAL BRIGHTNESS DISTRIBUTION FITS OF GAMMA-RAY BURST SOURCES *I. Horváth, P. Mészáros, & A. Mészáros*	56	257-A8
A BALLOON-BORNE MILLIMETER-WAVE TELESCOPE FOR COSMIC MICROWAVE BACKGROUND ANISOTROPY MEASUREMENTS *D. J. Fixsen, E. S. Cheng, D. A. Cottingham, W. C. Folz, C. A. Inman, M. S. Kowitt, S. S. Meyer, L. A. Page, J. L. Puchalla, J. E. Ruhl, & R. F. Silverberg*	63	257-B4
SCALE DEPENDENCE OF NONLINEAR GRAVITATIONAL CLUSTERING IN THE UNIVERSE *Ravi K. Sheth & William C. Saslaw*	78	257-C8
LARGE-SCALE STRUCTURE IN MIXED DARK MATTER MODELS WITH A NONTHERMAL VOLATILE COMPONENT *Elena Pierpaoli, Peter Coles, Silvio Bonometto, & Stefano Borgani*	92	257-D11
MIXED DARK MATTER IN HALOS OF CLUSTERS *Lev Kofman, Anatoly Klypin, Dmitry Pogosyan, & J. Patrick Henry*	102	257-E10
BUILDING A COSMOLOGICAL HYDRODYNAMIC CODE: CONSISTENCY CONDITION, MOVING MESH GRAVITY, AND SLH-P^3M *Nickolay Y. Gnedin & Edmund Bertschinger*	115	257-F12
COSMIC ERROR AND STATISTICS OF LARGE-SCALE STRUCTURE *István Szapudi & Stéphane Colombi*	131	258-A3
AN INSTABILITY IN THE RADIATIVE IONIZATION OF ATOMIC HYDROGEN/HELIUM GAS *Ethan Bradford & Craig Hogan*	149	258-B10
VOIDS IN REAL SPACE AND IN REDSHIFT SPACE *Barbara S. Ryden & Adrian L. Melott*	160	258-C10
THE LAS CAMPANAS REDSHIFT SURVEY *Stephen A. Shectman, Stephen D. Landy, Augustus Oemler, Douglas L. Tucker, Huan Lin, Robert P. Kirshner, & Paul L. Schechter*	172	258-D13
HUBBLE SPACE TELESCOPE IMAGING OF STAR-FORMING GALAXIES AT REDSHIFTS $z > 3$ *Mauro Giavalisco, Charles C. Steidel, & F. Duccio Macchetto*	189	258-F7
GEOMETRIC DISTANCE MEASUREMENT. II. *William B. Sparks*	195	258-G3
THEORY OF PIXEL LENSING *Andrew Gould*	201	258-G12
THREE-DIMENSIONAL SIMULATIONS OF EXTRAGALACTIC JETS CROSSING INTERSTELLAR MEDIUM/INTRACLUSTER MEDIUM INTERFACES *Jagbir S. Hooda & Paul J. Wiita*	211	259-A11

	Page	Fiche
OBSCURED ACTIVE GALACTIC NUCLEI IN LUMINOUS INFRARED GALAXIES *L. M. Shier, M. J. Rieke, & G. H. Rieke*	222	259-B11
RED GIANT–DISK ENCOUNTERS: FOOD FOR QUASARS? *P. J. Armitage, W. H. Zurek, & M. B. Davies*	237	259-D1
THE TWO-PHASE PAIR CORONA MODEL FOR ACTIVE GALACTIC NUCLEI AND X-RAY BINARIES: HOW TO OBTAIN EXACT SOLUTIONS *Juri Poutanen & Roland Svensson*	249	259-E2
LINE EMISSION IN ACTIVE GALACTIC NUCLEI: EFFECTS OF LOCAL DELAYS UPON LINE VARIABILITY *Jason A. Taylor*	269	259-F11
SPECTRA OF HIGH-IONIZATION SEYFERT 1 GALAXIES: IMPLICATIONS FOR THE NARROW-LINE REGION *David Moore, Ross D. Cohen, & Geoffrey W. Marcy*	280	259-G11
RESULTS OF DETAILED MODELING OF THE NARROW-LINE REGION OF SEYFERT GALAXIES *David Moore & Ross D. Cohen*	301	260-B7
MULTIWAVELENGTH OBSERVATIONS OF SHORT-TIMESCALE VARIABILITY IN NGC 4151. I. ULTRAVIOLET OBSERVATIONS *D. M. Crenshaw, P. M. Rodríguez-Pascual, S. V. Penton, R. A. Edelson, D. Alloin, T. R. Ayres, J. Clavel, K. Horne, W. N. Johnson, S. Kaspi, K. T. Korista, G. A. Kriss, J. H. Krolik, M. A. Malkan, D. Maoz, H. Netzer, P. T. O'Brien, B. M. Peterson, G. A. Reichert, J. M. Shull, M.-H. Ulrich, W. Wamsteker, R. S. Warwick, T. Yaqoob, T. J. Balonek, P. Barr, G. E. Bromage, M. Carini, T. E. Carone, F.-Z. Cheng, K. K. Chuvaev, M. Dietrich, V. T. Doroshenko, D. Dultzin-Hacyan, A. V. Filippenko, C. M. Gaskell, I. S. Glass, M. R. Goad, J. Hutchings, D. Kazanas, W. Kollatschny, A. P. Koratkar, A. Laor, K. Leighly, V. M. Lyutyi, G. M. MacAlpine, Yu. F. Malkov, P. G. Martin, B. McCollum, N. I. Merkulova, L. Metik, V. G. Metlov, H. R. Miller, S. L. Morris, V. L. Oknyanskij, J. Penfold, E. Pérez, G. C. Perola, G. Pike, R. W. Pogge, I. Pronik, V. I. Pronik, R. L. Ptak, M. C. Recondo-González, J. M. Rodríguez-Espinoza, E. L. Rokaki, J. Roland, A. C. Sadun, I. Salamanca, M. Santos-Lleó, S. G. Sergeev, S. M. Smith, M. A. J. Snijders, L. S. Sparke, G. M. Stirpe, R. E. Stoner, W.-H. Sun, E. van Groningen, R. M. Wagner, S. Wagner, I. Wanders, W. F. Welsh, R. J. Weymann, B. J. Wilkes, & W. Zheng*	322	260-D3
MULTIWAVELENGTH OBSERVATIONS OF SHORT-TIMESCALE VARIABILITY IN NGC 4151. II. OPTICAL OBSERVATIONS *S. Kaspi, D. Maoz, H. Netzer, B. M. Peterson, T. Alexander, A. J. Barth, R. Bertram, F.-Z. Cheng, K. K. Chuvaev, R. A. Edelson, A. V. Filippenko, S. Hemar, L. C. Ho, O. Kovo, T. Matheson, R. W. Pogge, B.-C. Qian, S. M. Smith, R. M. Wagner, H. Wu, S.-J. Xue, & Z.-L. Zou*	336	260-E6
MULTIWAVELENGTH OBSERVATIONS OF SHORT-TIMESCALE VARIABILITY IN NGC 4151. III. X-RAY AND GAMMA-RAY OBSERVATIONS *R. S. Warwick, D. A. Smith, T. Yaqoob, R. Edelson, W. N. Johnson, G. A. Reichert, J. Clavel, P. Magdziarz, B. M. Peterson, & A. A. Zdziarski*	349	260-F8
MULTIWAVELENGTH OBSERVATIONS OF SHORT-TIMESCALE VARIABILITY IN NGC 4151. IV. ANALYSIS OF MULTIWAVELENGTH CONTINUUM VARIABILITY *R. A. Edelson, T. Alexander, D. M. Crenshaw, S. Kaspi, M. A. Malkan, B. M. Peterson, R. S. Warwick, J. Clavel, A. V. Filippenko, K. Horne, K. T. Korista, G. A. Kriss, J. H. Krolik, D. Maoz, K. Nandra, P. T. O'Brien, S. V. Penton, T. Yaqoob, P. Albrecht, D. Alloin, T. R. Ayres, T. J. Balonek, P. Barr, A. J. Barth, R. Bertram, G. E. Bromage, M. Carini, T. E. Carone, F.-Z. Cheng, K. K. Chuvaev, M. Dietrich, D. Dultzin-Hacyan, C. M. Gaskell, I. S. Glass, M. R. Goad, S. Hemar, L. C. Ho, J. P. Huchra, J. Hutchings, W. N. Johnson, D. Kazanas, W. Kollatschny, A. P. Koratkar, O. Kovo, A. Laor, G. M. MacAlpine, P. Magdziarz, P. G. Martin, T. Matheson, B. McCollum, H. R. Miller, S. L. Morris, V. L. Oknyanskij, J. Penfold, E. Pérez, G. C. Perola, G. Pike, R. W. Pogge, R. L. Ptak, B.-C. Qian, M. C. Recondo-González, G. A. Reichert, J. M. Rodríguez-Espinoza, P. M. Rodríguez-Pascual, E. L. Rokaki, J. Roland, A. C. Sadun, I. Salamanca, M. Santos-Lleó, J. C. Shields, J. M. Shull, D. A. Smith, S. M. Smith, M. A. J. Snijders, G. M. Stirpe, R. E. Stoner, W.-H. Sun, M.-H. Ulrich, E. van Groningen, R. M. Wagner, S. Wagner, I. Wanders, W. F. Welsh, R. J. Weymann, B. J. Wilkes, H. Wu, J. Wurster, S.-J. Xue, A. A. Zdziarski, W. Zheng, & Z.-L. Zou*	364	260-G12
THE DISAPPEARING BROAD ABSORPTION LINES AND VARIABLE EMISSION LINES IN NGC 3516 *Anuradha Koratkar, Michael R. Goad, Paul T. O'Brien, Isabel Salamanca, Ignaz Wanders, David Axon, D. Michael Crenshaw, Andrew Robinson, Kirk Korista, Pedro Rodríguez-Pascual, Keith Horne, Jim Blackwell, Michael Carini, Martin England, Mario Perez, Ronald Pitts, Lloyd Rawley, Gail Reichert, Chris Shrader, & Willem Wamsteker*	378	261-B1
THE SYMMETRIC PARSEC-SCALE JETS OF THE RADIO GALAXY HYDRA A *Gregory B. Taylor*	394	261-C8
A KECK HIRES INVESTIGATION OF THE METAL ABUNDANCES AND KINEMATICS OF THE $z = 2.46$ DAMPED Lyα SYSTEM TOWARD Q0201+365 *Jason X. Prochaska & Arthur M. Wolfe*	403	261-D8

CONTENTS

	Page	Fiche
EVIDENCE FOR A MASSIVE BLACK HOLE IN THE ACTIVE GALAXY NGC 4261 FROM *HUBBLE SPACE TELESCOPE* IMAGES AND SPECTRA *Laura Ferrarese, Holland C. Ford, & Walter Jaffe*	444	262-A9
NUMERICAL SIMULATIONS OF STANDING SHOCKS IN ACCRETION FLOWS AROUND BLACK HOLES: A COMPARATIVE STUDY *Diego Molteni, Dongsu Ryu, & Sandip K. Chakrabarti*	460	262-C4
GAMMA-RAY PULSARS: RADIATION PROCESSES IN THE OUTER MAGNETOSPHERE *Roger W. Romani*	469	262-D2
DISTRIBUTIONS OF PEAK FLUX AND DURATION FOR GAMMA-RAY BURSTS *Theodore T. Lee & Vahé Petrosian*	479	262-E1
MICROLENSING RATES FROM SELF-CONSISTENT GALACTIC MODELS *F. De Paolis, G. Ingrosso, & Ph. Jetzer*	493	262-F4
A MEASUREMENT OF THE SOLAR AND SIDEREAL COSMIC-RAY ANISOTROPY AT $E_0 \sim 10^{14}$ eV *M. Aglietta, B. Alessandro, P. Antonioli, F. Arneodo, L. Bergamasco, M. Bertaina, A. Bosio, A. Castellina, C. Castagnoli, A. Chiavassa, G. Cini Castagnoli, B. D'Ettorre Piazzoli, G. Di Sciascio, W. Fulgione, P. Galeotti, P. L. Ghia, M. Iacovacci, G. Mannocchi, C. Melagrana, N. Mengotti Silva, C. Morello, G. Navarra, L. Riccati, O. Saavedra, G. C. Trinchero, P. Vallania, & S. Vernetto (The EAS-TOP Collaboration)*	501	262-G1
PROPER-MOTION ANISOTROPY, ROTATION, AND THE SHAPE OF THE GALACTIC BULGE *HongSheng Zhao, R. Michael Rich, & Joseph Biello*	506	262-G10
ROSAT OBSERVATIONS OF THE SOFT GAMMA-RAY BURST ERROR BOX COINCIDENT WITH THE SUPERNOVA REMNANT N49 *D. Marsden, R. E. Rothschild, R. E. Lingenfelter, & R. C. Puetter*	513	263-A6
THE IMPLICATIONS OF THE BINARY PROPERTIES OF THE M67 BLUE STRAGGLERS *Peter J. T. Leonard*	521	263-B3
LIFETIMES OF ULTRACOMPACT H II REGIONS: HIGH-RESOLUTION METHYL CYANIDE OBSERVATIONS *R. L. Akeson & J. E. Carlstrom*	528	263-B13
THE THERMAL STRUCTURE OF MAGNETIC ACCRETION FUNNELS IN YOUNG STELLAR OBJECTS *Steven C. Martin*	537	263-C11
RADIATIVE TORQUES ON INTERSTELLAR GRAINS. I. SUPERTHERMAL SPIN-UP *B. T. Draine & Joseph C. Weingartner*	551	263-E2
POLARIZATION OF THE FAR-INFRARED EMISSION FROM M17 *Jessie L. Dotson*	566	263-F6
INFRARED OBSERVATIONS OF DUST FORMATION AND CORONAL EMISSION IN NOVA AQUILAE 1995 *C. G. Mason, R. D. Gehrz, Charles E. Woodward, J. B. Smilowitz, Matthew A. Greenhouse, T. L. Hayward, & J. R. Houck*	577	263-G6
THE MACHO PROJECT LARGE MAGELLANIC CLOUD VARIABLE STAR INVENTORY. IV. NEW R CORONAE BOREALIS STARS *C. Alcock, R. A. Allsman, D. R. Alves, T. S. Axelrod, A. Becker, D. P. Bennett, G. C. Clayton, K. H. Cook, K. C. Freeman, K. Griest, J. A. Guern, D. Kilkenny, M. J. Lehner, S. L. Marshall, D. Minniti, B. A. Peterson, M. R. Pratt, P. J. Quinn, A. W. Rodgers, C. W. Stubbs, W. Sutherland, & D. L. Welch*	583	264-A1
ROTATION-DRIVEN SHEAR FLOW INSTABILITIES *Tzihong Chiueh*	591	264-A12
INFRARED SPECTRA OF MASSIVE STARS IN TRANSITION: WNL, Of, Of/WN, Be, B[e], AND LUMINOUS BLUE VARIABLE STARS *Patrick W. Morris, P. R. J. Eenens, Margaret M. Hanson, Peter S. Conti, & R. D. Blum*	597	264-B7
ON THE INFERENCE OF THE SOLAR INTERNAL ROTATION PROFILE FROM FREQUENCY-SPLITTING DATA *P. R. Wilson, D. Burtonclay, & Y. Li*	621	264-D6
A LONG-DURATION SOLAR FLARE WITH MASS EJECTION AND GLOBAL CONSEQUENCES *H. S. Hudson, L. W. Acton, & S. L. Freeland*	629	264-E3
DOPPLER ACOUSTIC DIAGNOSTICS OF SUBSURFACE SOLAR MAGNETIC STRUCTURE *C. Lindsey, D. C. Braun, S. M. Jefferies, M. F. Woodard, Y. Fan, Y. Gu, & S. Redfield*	636	264-F3
ULTRAVIOLET JETS AND BRIGHT POINTS IN THE SOLAR CHROMOSPHERE. I. SEARCH FOR ONE-TO-ONE RELATIONSHIPS *J. W. Cook, R. J. Rutten, & N. M. Hoekzema*	647	264-G11
ADDENDUM		
STAR-DISK COLLISIONS AND THE ORIGIN OF THE BROAD LINES IN QUASARS *Wojciech H. Zurek, Aneta Siemiginowska, & Stirling A. Colgate*	652	265-A11

CONTENTS

1996 OCTOBER 20, Number 2

	Page	Fiche
CALIBRATION AND SYSTEMATIC ERROR ANALYSIS FOR THE *COBE* DMR 4 YEAR SKY MAPS *A. Kogut, A. J. Banday, C. L. Bennett, K. M. Górski, G. Hinshaw, P. D. Jackson, P. Keegstra, C. Lineweaver, G. F. Smoot, L. Tenorio, & E. L. Wright*	653	268-C1
THE SIZE DISTRIBUTION OF EXCURSION SETS AND THE COSMIC MASS FUNCTION *J. Betancort-Rijo & M. López-Corredoira*	674	268-D11
CLUSTERING OF THE DIFFUSE INFRARED LIGHT FROM THE *COBE* DIRBE MAPS. I. $C(0)$ AND LIMITS ON THE NEAR-INFRARED BACKGROUND *A. Kashlinsky, J. C. Mather, S. Odenwald, & M. G. Hauser*	681	268-E6
LINEAR REGRESSION FOR ASTRONOMICAL DATA WITH MEASUREMENT ERRORS AND INTRINSIC SCATTER *Michael G. Akritas & Matthew A. Bershady*	706	268-G12
HIGH-ACCURACY MINIMUM RELAXATION N-BODY SIMULATIONS USING ORTHOGONAL SERIES FORCE COMPUTATION *Martin D. Weinberg*	715	269-A10
AN OPTICAL AND X-RAY STUDY OF ABELL 576, A GALAXY CLUSTER WITH A COLD CORE *Joseph J. Mohr, Margaret J. Geller, Daniel G. Fabricant, Gary Wegner, John Thorstensen, & Douglas O. Richstone*	724	269-B8
LIGHT CURVE OF A SOURCE ORBITING A BLACK HOLE: A FITTING FORMULA *V. Karas*	743	269-D2
STRUCTURE AND EVOLUTION OF INTERSTELLAR GAS IN FLATTENED, ROTATING ELLIPTICAL GALAXIES *Fabrizio Brighenti & William G. Mathews*	747	269-D9
MULTIPHASE CHEMICAL EVOLUTION IN ELLIPTICAL GALAXIES *Yutaka Fujita, Junji Fukumoto, & Katsuya Okoshi*	762	269-E13
IRAS FSC 15307+3252: GRAVITATIONALLY LENSED SEYFERT OR CANNIBAL ELLIPTICAL AT $z = 0.93$? *Michael C. Liu, James R. Graham, & Gillian S. Wright*	771	269-F12
OBSERVATIONS OF MOLECULAR GAS IN THE DWARF ELLIPTICAL GALAXY NGC 185 *Gary A. Welch, George F. Mitchell, & Sukyoung Yi*	781	269-G11
DETECTION OF DYNAMICAL STRUCTURES USING COLOR GRADIENTS IN GALAXIES *A. C. Quillen, Solange V. Ramírez, & Jay A. Frogel*	790	270-A11
ON THE STABILITY OF MAGNETIZED ROTATING JETS: THE NONAXISYMMETRIC MODES *G. Bodo, R. Rosner, A. Ferrari, & E. Knobloch*	797	270-B7
ON THE HOST GALAXIES OF THE GIGAHERTZ PEAKED-SPECTRUM RADIO SOURCES *Chistopher P. O'Dea, Carlo Stanghellini, Stefi A. Baum, & Stephane Charlot*	806	270-C5
RADIAL LIGHT DISTRIBUTIONS IN FIVE SPIRAL GALAXIES: THE RELATIONSHIP BETWEEN YOUNG STARS AND THE RELATIVISTIC GAS *Neb Duric, Jason Glenn, Randy Grashuis, Jim Kunkle, & Alex Collins*	814	270-D3
BIMA CS $J = 2 \rightarrow 1$ OBSERVATIONS OF NGC 253: KINEMATIC EVIDENCE FOR DENSE GAS IN A BAR *R. Peng, S. Zhou, J. B. Whiteoak, K. Y. Lo, & E. C. Sutton*	821	270-D13
EGRET OBSERVATIONS OF THE 1993 MARCH GAMMA-RAY FLARE FROM PKS 0528+134 *R. Mukherjee, B. L. Dingus, W. K. Gear, R. C. Hartman, S. D. Hunter, A. P. Marscher, E. M. Moore, M. Pohl, E. I. Robson, P. Sreekumar, J. A. Stevens, H. Teräsranta, M. Tornikoski, J. P. Travis, S. J. Wagner, & Y. F. Zhang*	831	270-E13
GLOBAL MODELS OF THE GALACTIC INTERSTELLAR MEDIUM: COMPARISON TO X-RAY AND H I OBSERVATIONS *Alexander Rosen, Joel N. Bregman, & Daniel D. Kelson*	839	270-F10
TURBULENT DIFFUSION OF MAGNETIC FIELD LINES IN ASTROPHYSICAL PLASMAS *A. F. Barghouty & J. R. Jokipii*	858	271-A5
JHKL PHOTOMETRY AND THE *K*-BAND LUMINOSITY FUNCTION AT THE GALACTIC CENTER *R. D. Blum, K. Sellgren, & D. L. DePoy*	864	271-B1
EXCITATION OF THE "ARCHED" FILAMENTS NEAR THE GALACTIC CENTER *Sean W. J. Colgan, Edwin F. Erickson, Janet P. Simpson, Michael R. Haas, & Mark Morris*	882	271-C8
INTERSTELLAR GAS-PHASE ABUNDANCES AND PHYSICAL CONDITIONS TOWARD TWO DISTANT HIGH-LATITUDE HALO STARS *Blair D. Savage & Kenneth R. Sembach*	893	271-D8

CONTENTS

	Page	Fiche
CCD PHOTOMETRY OF THE GLOBULAR CLUSTER M5. I. THE COLOR-MAGNITUDE DIAGRAM AND LUMINOSITY FUNCTIONS *Eric L. Sandquist, Michael Bolte, Peter B. Stetson, & James E. Hesser*	910	271-F2
HIGH-DISPERSION SPECTROSCOPY OF GIANTS IN METAL-POOR GLOBULAR CLUSTERS. II. OXYGEN AND SODIUM ABUNDANCES *Dante Minniti, Ruth C. Peterson, Doug Geisler, & Juan J. Clariá*	953	272-B13
ASCA OBSERVATIONS OF THE COMPOSITE SUPERNOVA REMNANT G29.7−0.3 *Elizabeth L. Blanton & David J. Helfand*	961	272-C10
OPTICAL SPECTROSCOPY AND IMAGING OF THE NORTHEAST JET IN THE CASSIOPEIA A SUPERNOVA REMNANT *Robert A. Fesen & Kurt S. Gunderson*	967	272-D5
THREE MILLIMETER MOLECULAR LINE OBSERVATIONS OF SAGITTARIUS B2. II. HIGH-RESOLUTION STUDIES OF $C^{18}O$, HNCO, NH_2CHO, AND $HCOOCH_3$ *Yi-Jehng Kuan & Lewis E. Snyder*	981	272-E13
THE DISPERSING CLOUD CORE AROUND T TAURI *Munetake Momose, Nagayoshi Ohashi, Ryohei Kawabe, Masahiko Hayashi, & Takenori Nakano*	1001	272-G8
NEUTRINO ENERGY LOSS IN STELLAR INTERIORS. VIII. BRAATEN-SEGEL APPROXIMATION FOR THE PLASMA NEUTRINO PROCESS *Naoki Itoh, Akinori Nishikawa, & Yasuharu Kohyama*	1015	273-B1
SIMPLIFIED TREATMENT OF THE RADIATIVE TRANSFER PROBLEM IN EXPANDING ENVELOPES *J. Gómez-Gomar & J. Isern*	1018	273-B7
ACCRETION DISKS IN INTERACTING BINARIES: SIMULATIONS OF THE STREAM-DISK IMPACT *P. J. Armitage & M. Livio*	1024	273-C3
MOTION OF ACCRETING MATTER NEAR LUMINOUS SLOWLY ROTATING RELATIVISTIC STARS *M. Coleman Miller & Frederick K. Lamb*	1033	273-D1
TIME-RESOLVED OPTICAL SPECTROSCOPY OF THE CATACLYSMIC VARIABLE PG 0859+415 *D. W. Hoard & Paula Szkody*	1052	273-E9
THE NATURE OF THE SUPERSOFT X-RAY SOURCE RX J0513-69 *K. A. Southwell, M. Livio, P. A. Charles, D. O'Donoghue, & W. J. Sutherland*	1065	273-G4
SPHERICAL ACCRETION IN A UNIFORMLY EXPANDING UNIVERSE *Monica Colpi, Stuart L. Shapiro, & Ira Wasserman*	1075	274-A4
HOT BOTTOM BURNING IN ASYMPTOTIC GIANT BRANCH STARS AND THE TURBULENT CONVECTION MODEL *Francesca D'Antona & Italo Mazzitelli*	1093	274-B11
A SURVEY FOR MILLISECOND PULSARS *P. S. Ray, S. E. Thorsett, F. A. Jenet, M. H. van Kerkwijk, S. R. Kulkarni, T. A. Prince, J. S. Sandhu, & D. J. Nice*	1103	274-C11
RADIO BEAM OF THE RELATIVISTIC BINARY PULSAR B1534+12 *Z. Arzoumanian, J. A. Phillips, J. H. Taylor, & A. Wolszczan*	1111	274-D9
HYDROGEN MASERS. I. THEORY AND PROSPECTS *Vladimir S. Strelnitski, Victor O. Ponomarev, & Howard A. Smith*	1118	274-E5
HYDROGEN MASERS. II. MWC 349A *Vladimir S. Strelnitski, Howard A. Smith, & Victor O. Ponomarev*	1134	274-F10
HST/GHRS OBSERVATIONS OF THE β PICTORIS SYSTEM. II. EXPLORING THE POTENTIAL FOR TRACKING COMET-LIKE OBJECTS ORBITING THE STAR *Ivan Hubeny & Sara R. Heap*	1144	274-G9
THE PROPERTIES OF THE LOCAL INTERSTELLAR MEDIUM AND THE INTERACTION OF THE STELLAR WINDS OF ϵ INDI AND λ ANDROMEDAE WITH THE INTERSTELLAR ENVIRONMENT *Brian E. Wood, William R. Alexander, & Jeffrey L. Lisky*	1157	275-A11
GODDARD HIGH RESOLUTION SPECTROGRAPH OBSERVATIONS OF VARIABILITY IN THE RS CANUM VENATICORUM SYSTEM V711 TAURI (HR 1099) *Robert C. Dempsey, James E. Neff, Marjorie J. Thorpe, Jeffrey L. Linsky, Alexander Brown, Giuseppe Cutispoto, & Marcello Rodonò*	1172	275-C1
TIDAL DECAY OF CLOSE PLANETARY ORBITS *F. A. Rasio, C. A. Tout, S. H. Lubow, & M. Livio*	1187	275-D6
THE VIABILITY OF OHMIC DISSIPATION AS A CORONAL HEATING SOURCE *D. L. Hendrix, G. Van Hoven, Z. Mikić, & D. D. Schnack*	1192	275-E1

	Page	Fiche
THE SCALING LAW BETWEEN ELECTRON TIME-OF-FLIGHT DISTANCES AND LOOP LENGTHS IN SOLAR FLARES *Markus J. Aschwanden, Takeo Kosugi, Hugh S. Hudson, Meredith J. Wills, & Richard A. Schwartz*	1198	275-E10
THE PROPAGATION OF ULTRAHEAVY COSMIC-RAY NUCLEI USING ENERGY-DEPENDENT CROSS SECTIONS *C. Jake Waddington*	1218	276-A6
GEOLOGICAL ISOTOPE ANOMALIES AS SIGNATURES OF NEARBY SUPERNOVAE *John Ellis, Brian D. Fields, & David N. Schramm*	1228	276-B4
THE MILLIMETER-WAVE SPECTRUM AND REST FREQUENCIES OF FeF ($X\ ^6\Delta_i$) *M. D. Allen & L. M. Ziurys*	1237	276-C4
ERRATUM		
LITHIUM IN LOWER MAIN-SEQUENCE STARS OF THE α PERSEI CLUSTER *Suchitra Balachandran, David L. Lambert, & John R. Stauffer*	1243	276-C13
ABSTRACTS OF THE ASTROPHYSICAL JOURNAL SUPPLEMENT SERIES, 1996 NOVEMBER		
THE MORPHOLOGIES OF DISTANT GALAXIES. II. CLASSIFICATIONS FROM THE *HUBBLE SPACE TELESCOPE* MEDIUM DEEP SURVEY *Roberto G. Abraham, Sidney van den Bergh, Karl Glazebrook, Richard S. Ellis, Basilio X. Santiago, Peter Surma, & Richard E. Griffiths*	1245	276-D5
THE MOLONGO REFERENCE CATALOG/1 Jy RADIO SOURCE SURVEY. I. RADIO GALAXY IDENTIFICATIONS *Patrick J. McCarthy, Vijay K. Kahapi, Wil van Breugel, S. E. Persson, Ramana Athreya, & C. R. Subrahamanya*	1245	276-D5
A COMPLETE FLUX-DENSITY-LIMITED VLBI SURVEY OF 293 FLAT-SPECTRUM RADIO SOURCES *G. B. Taylor, R. C. Vermeulen, A. C. S. Readhead, T. J. Pearson, D. R. Henstock, & P. N. Wilkinson*	1246	276-D6
COMBINED ULTRAVIOLET AND OPTICAL SPECTRA OF 48 LOW-REDSHIFT QSOs AND THE RELATION OF THE CONTINUUM AND EMISSION-LINE PROPERTIES *Michael R. Corbin & Todd A. Boroson*	1246	276-D6
PARAMETERS OF 2447 SOUTHERN SPIRAL GALAXIES FOR USE IN THE TULLY-FISHER RELATION *D. S. Mathewson & V. L. Ford*	1247	276-D7
SURFACE PHOTOMETRY OF LOW SURFACE BRIGHTNESS DWARF IRREGULAR GALAXIES *Richard J. Patterson & Trinh X. Thuan*	1247	276-D7
A SURVEY OF LOW SURFACE BRIGHTNESS DWARF GALAXIES TO DETECT H I–RICH COMPANIONS *Christopher L. Taylor, David L. Thomas, Elias Brinks, & Evan D. Skillman*	1248	276-D8
VLA IMAGING OF A SAMPLE OF STEEP-SPECTRUM RADIO GALAXIES *George Rhee, Kevin Marvel, Tom Wilson, Jacques Roland, Malcolm Bremer, Neal Jackson, & John Webb*	1248	276-D8
THE STROMLO-APM REDSHIFT SURVEY. IV. THE REDSHIFT CATALOG *J. Loveday, B. A. Peterson, S. J. Maddox, & G. Efstathiou*	1248	276-D8
AN ATLAS OF *HUBBLE SPACE TELESCOPE* ULTRAVIOLET IMAGES OF NEARBY GALAXIES *Dan Maoz, Alexei V. Filippenko, Luis C. Ho, F. Duccio Macchetto, Hans-Walter Rix, & Donald P. Schneider*	1249	276-D9
SUPPLEMENT TO THE SECOND EGRET CATALOG OF HIGH-ENERGY GAMMA-RAY SOURCES *D. J. Thompson, D. L. Bertsch, B. L. Dingus, J. A. Esposito, A. Etienne, C. E. Fichtel, D. P. Friedlander, R. C. Hartman, S. D. Hunter, D. J. Kendig, J. R. Mattox, L. M. McDonald, R. Mukherjee, P. V. Ramanamurthy, P. Streekumar, C. von Montigny, J. M. Fierro, B. B. Jones, Y. C. Lin, P. F. Michelson, P. L. Nolan, W. Tompkins, T. D. Willis, G. Kanbach, H. A. Mayer-Hasselwander, M. Merck, M. Pohl, D. A. Kniffen, & E. J. Schneid*	1249	276-D9
A WESTERBORK SYNTHESIS RADIO TELESCOPE 327 MHz SURVEY OF THE GALACTIC PLANE *A. R. Taylor, W. M. Goss, P. H. Coleman, J. van Leeuwen, & B. J. Wallace*	1250	276-D10
AN ATLAS OF ANCIENT PLANETARY NEBULAE AND THEIR INTERACTION WITH THE INTERSTELLAR MEDIUM *Richard W. Tweedy & Karen B. Kwitter*	1250	276-D10
Mg EMISSION FROM HYBRID-CHROMOSPHERE STARS: 1.5 DECADES OF CHROMOSPHERIC VARIABILITY MONITORING *Alexander Brown, Bryan D. Deeney, Thomas R. Ayres, Anthony Vealé, & Philip D. Bennett*	1250	276-D10
HIGH-RESOLUTION SPECTRA OF ORDINARY COOL STARS IN THE *K* BAND *L. Wallace & K. Hinkle*	1251	276-D11
A SPECTRAL ATLAS OF HOT, LUMINOUS STARS AT 2 MICRONS *M. M. Hanson, P. S. Conti, & M. J. Rieke*	1251	276-D11
EXTREMELY METAL-POOR STARS. I. SPECTROSCOPIC DATA *John E. Norris, Sean G. Ryan, & Timothy C. Beers*	1251	276-D11
SPECTROPHOMETRY OF FLUX CALIBRATION STARS FOR *HUBBLE SPACE TELESCOPE* *Remington P. S. Stone*	1252	276-D12
NEAR-INFRARED SPECTROSCOPY OF TiO: LABORATORY MEASUREMENTS AND IDENTIFICATION IN SUNSPOTS *R. S. Ram, P. F. Bernath, & L. Wallace*	1252	276-D12
THE CALIBRATION OF THE *EUVE* SPECTROMETERS. I. WAVELENGTH CALIBRATION AND RESOLUTION *Mark J. Abbott, William T. Boyd, Pat Jelinsky, Carol Christian, Anne Miller-Bagwell, Michael Lampton, Roger F. Malina, & John V. Vallerga*	1252	276-D12
INDEX TO VOLUMES 468–470, PARTS 1 AND 2	i	276-E1